


**Company name:** Hartmann Elektrotechnik GmbH  
**Created by:** Ralf Witting  
**Phone:** 040 752466 42  
**Fax:** 040 752466 50  
**Date:** 09.01.2012

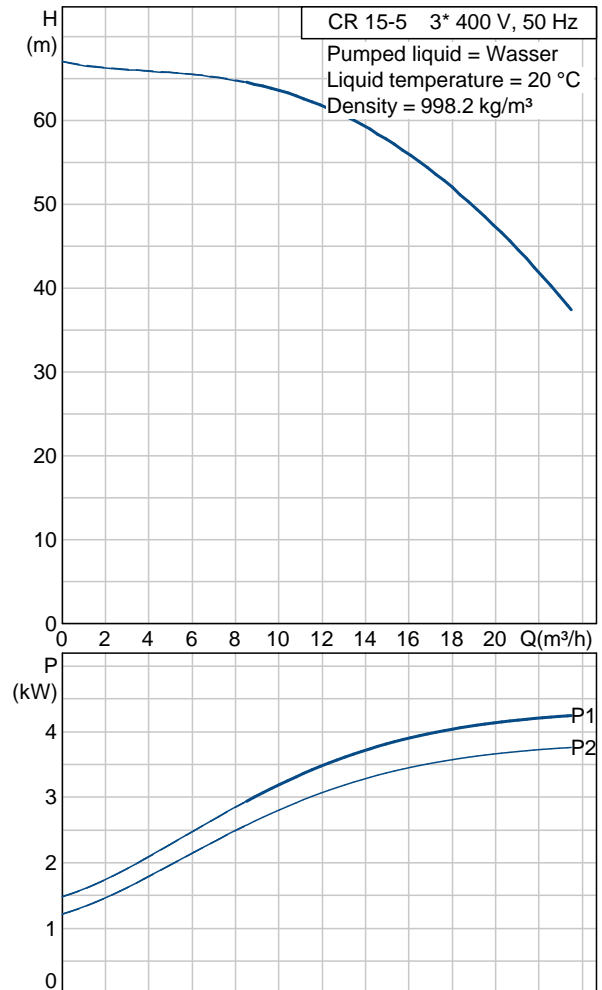
Position	Qty.	Description	Single Price
	1	<p><b>CR 15-5 A-F-A-V-HQQV</b></p>  <p><b>Note! Product picture may differ from actual product</b></p> <p>Product No.: 96501986            Vertical, non-self-priming, multistage, in-line, centrifugal pump for installation in pipe systems and mounting on a foundation.</p> <p><b>The pump has the following characteristics:</b></p> <ul style="list-style-type: none"> <li>- Impellers and intermediate chambers are made of Stainless steel DIN W.-Nr. DIN W.-Nr. 1.4301.</li> <li>- Pump head and base are made of Cast iron.</li> <li>- The shaft seal has assembly length according to EN 12756.</li> <li>- Power transmission is via cast iron split coupling.</li> <li>- Pipework connection is via DINflanges.</li> </ul> <p>The motor is a 3-phase AC motor.</p> <p><b>Liquid:</b>            Liquid temperature range: -20 .. 90 °C            Liquid temp: 20 °C            Density: 998.2 kg/m³</p> <p><b>Technical:</b>            Speed for pump data: 2917 rpm            Actual calculated flow: 17 m³/h            Resulting head of the pump: 54.1 m            Shaft seal: HQQV            Approvals on nameplate: CE</p> <p><b>Materials:</b>            Pump housing: Cast iron                              EN-JL1030                              ASTM A48-30 B            Impeller: Stainless steel                              DIN W.-Nr. 1.4301                              AISI 304</p> <p><b>Installation:</b>            Maximum ambient temperature: 60 °C            Max pressure at stated temp: 16 bar / 90 °C              16 / -20 bar / °C            Flange standard: DIN            Pipe connection: DN 50</p>	Price on request

**Company name:** Hartmann Elektrotechnik GmbH  
**Created by:** Ralf Witting  
**Phone:** 040 752466 42  
**Fax:** 040 752466 50  
**Date:** 09.01.2012

<i>Position</i>	<i>Qty.</i>	<i>Description</i>	<i>Single Price</i>
		Pressure stage: PN 16 Flange size for motor: FT130  <b>Electrical data:</b> Motor type: 112MC IE Efficiency class: IE3 Number of poles: 2 Rated power - P2: 4 kW Power (P2) required by pump: 4 kW 4 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-415 D V Rated current: 7.9 A Starting current: 1000-1110 % Cos phi - power factor: 0,87-0,87 Rated speed: 2920-2940 rpm IE efficiency: IE3 88,1% Motor efficiency at full load: 88,1-88,1 % Motor efficiency at 3/4 load: 88,6-88,2 % Motor efficiency at 1/2 load: 85,2-88,1 % Enclosure class (IEC 34-5): 55 (Protect. water jets/dust) Insulation class (IEC 85): F  <b>Others:</b> Label: Grundfos Blueflux Net weight: 69 kg Gross weight: 91 kg Shipping volume: 0.12 m3	

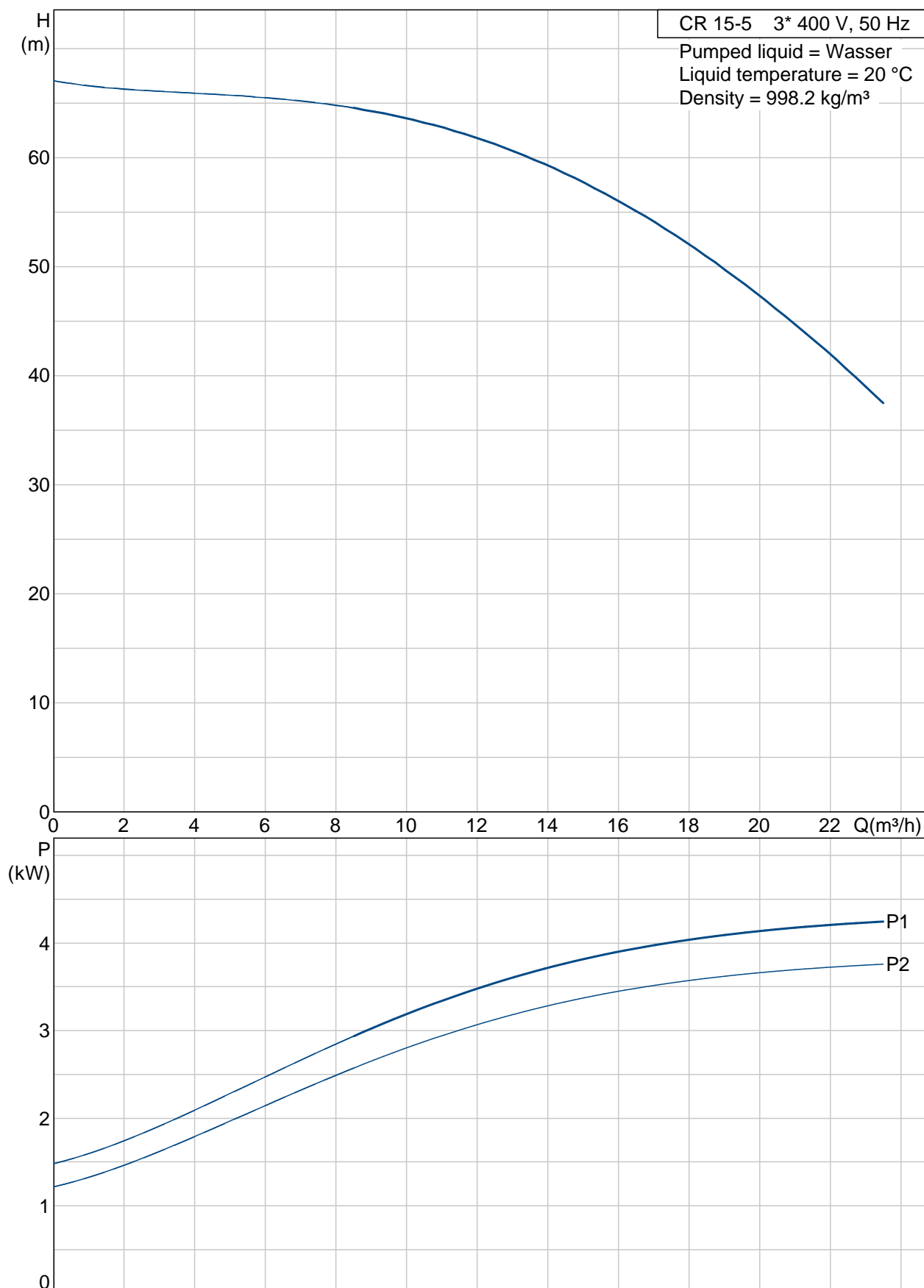
**Company name:** Hartmann Elektrotechnik GmbH  
**Created by:** Ralf Witting  
**Phone:** 040 752466 42  
**Fax:** 040 752466 50  
**Date:** 09.01.2012

Description	Value
Product name:	CR 15-5 A-F-A-V-HQQV
Product No:	96501986
EAN number:	5700396233185
Technical:	
Speed for pump data	2917 rpm
Actual calculated flow:	17 m³/h
Resulting head of the pump:	54.1 m
Head max:	70.6 m
Impellers:	05
Shaft seal:	HQQV
Approvals on nameplate:	CE
Stages:	05
Pump version:	A
Model:	A
Materials:	
Pump housing:	Cast iron EN-JL1030 ASTM A48-30 B
Impeller:	Stainless steel DIN W.-Nr. 1.4301 AISI 304
Material code:	A
Code for rubber:	V
Installation:	
Maximum ambient temperature:	60 °C
Max pressure at stated temp	16 bar / 90 °C 16 / -20 bar / °C
Flange standard:	DIN
Connect code:	F
Pipe connection:	DN 50
Pressure stage:	PN 16
Flange size for motor:	FT130
Liquid:	
Liquid temperature range	-20 .. 90 °C
Liquid temp:	20 °C
Density:	998.2 kg/m³
Electrical data:	
Motor type:	112MC
IE Efficiency class:	IE3
Number of poles:	2
Rated power - P2:	4 kW
Power (P2) required by pump	4 kW 4 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-415 D V
Rated current:	7.9 A
Starting current	1000-1110 %
Cos phi - power factor:	0,87-0,87
Rated speed:	2920-2940 rpm
IE efficiency:	IE3 88,1%
Motor efficiency at full load:	88,1-88,1 %
Motor efficiency at 3/4 load:	88,6-88,2 %
Motor efficiency at 1/2 load:	85,2-88,1 %
Enclosure class (IEC 34-5):	55 (Protect. water jets/dust)
Insulation class (IEC 85):	F
Motor protec:	PTC
Motor No:	85U15413
Others:	
Label:	Grundfos Blueflux
Net weight:	69 kg
Gross weight:	91 kg
Shipping volume:	0.12 m³



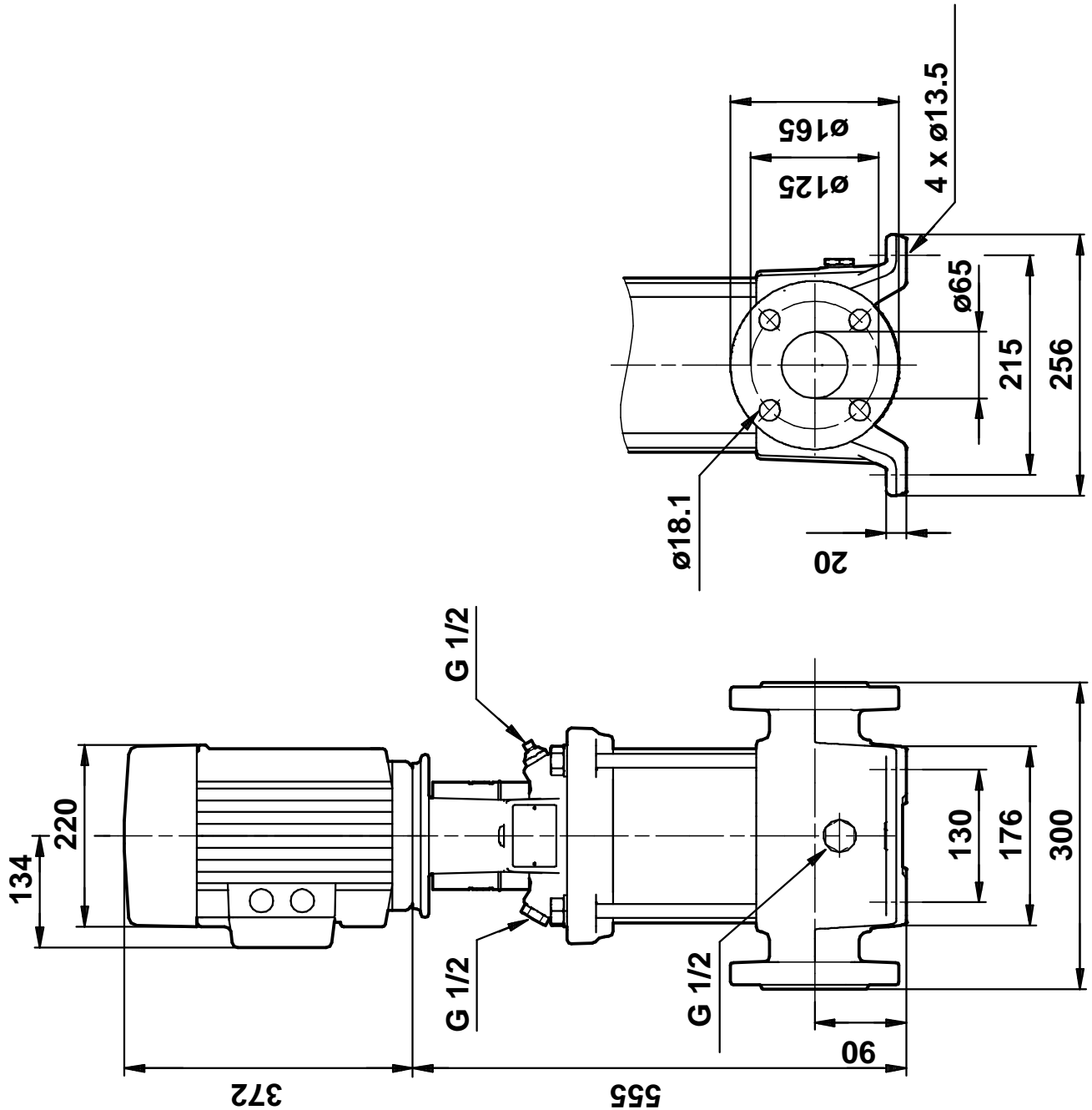
**Company name:** Hartmann Elektrotechnik GmbH  
**Created by:** Ralf Witting  
**Phone:** 040 752466 42  
**Fax:** 040 752466 50  
**Date:** 09.01.2012

## 96501986 CR 15-5 50 Hz



**Company name:** Hartmann Elektrotechnik GmbH  
**Created by:** Ralf Witting  
**Phone:** 040 752466 42  
**Fax:** 040 752466 50  
**Date:** 09.01.2012

96501986 CR 15-5 50 Hz



Note! All units are in [mm] unless others are stated.  
 Disclaimer: This simplified dimensional drawing does not show all details.